NOVA SCOTIA

DEPARTMENT OF HEALTH

November 2001

HIV/AIDS Surveillance Report

2000

Table of Contents

Introduction ..... page 2

Limitations ..... page 3

Provincial HIV Surveillance Data ..... page 5

Provincial AIDS Surveillance Data ..... page 10

Glossary of Terms ..... page 16

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Introduction

HIV infection has been reportable in Nova Scotia since 1990. AIDS reporting began in the mid 1980's as part of the national surveillance system. HIV/AIDS surveillance in Nova Scotia relies on physicians, public health staff, and clinical laboratories for reporting of HIV infection. Public health staff have been actively involved with the surveillance system by following up positive HIV laboratory reports with physicians. A copy of the case report form is sent to the provincial Medical Officer of Health.

An AIDS case is reported to public health by the treating physician via a standard federal surveillance form. A copy of the form is sent to the provincial MOH and then forwarded electronically to the Centre for Infectious Disease Prevention and Control (CIDPC) at Health Canada in Ottawa on a quarterly basis. This report is an annual summary of reported cases of HIV/AIDS in Nova Scotia, compiled and released to the general public and stakeholders.

This report attempts to bring together information relevant to HIV and AIDS in Nova Scotia. It is divided into two sections (1) HIV and (2)AIDS. A new HIV/AIDS database has recently been adopted by the Provincial Department of Health that was created by Health Canada using ACCESS software. This database compliments the federal reporting form used across the country. This new system allows reports and data inquires to be addressed more efficiently and will increase integrity of the data reported at both provincial and national levels.

Case definition for AIDS and HIV[1]

Acquired Immunodeficiency Syndrome (AIDS) is defined as an illness characterized by:

a) Laboratory evidence of HIV infection and
b) any one of the 23 recognized "indicator" diseases.

Non-AIDS HIV infection: Serologic or other evidence of HIV infection in an individual who does not meet the above case definition for AIDS.

[1] Communicable Disease Control Manual, Nova Scotia Department of Health 1993

Limitations

(1) HIV Reporting:

Out of Province Testing - Individuals who have tested positive outside of Nova Scotia may not be reported here and therefore do not appear in the provincial statistics.

Reporting Delay - The majority of delays in reporting HIV and AIDS cases to the provincial MOH occur when there is a protracted time between the diagnosis and the completion of a case report form. Direct follow-up with health care providers is often time consuming and slow.

Lost to Follow Up - Deaths of people who are HIV-positive are not recorded unless they die of an AIDS-related condition. For example, the death of an HIV-positive person who dies due to a heart attack would not be counted whereas a death due to Pneumocystis carinii pneumonia, a disease indicative of AIDS, would be counted. For an HIV-positive individual who has moved out of Nova Scotia, vital status may not necessarily be known.

Note: Statistics for Nova Scotia reflect all reported HIV-positive tests to-date but reports are currently under review to ensure adequate completion of data fields integral to national surveillance.

(2) AIDS Reporting:

Under Reporting - Based on record linkage studies with the Canadian Mortality database, CIDPC estimates that 85% of AIDS cases diagnosed will eventually be reported. Migration of people from one province to another also affects the reporting of data. For example, a person may be diagnosed as having AIDS in Toronto and then move to Nova Scotia for treatment. As AIDS cases are attributed to the province where onset of the illness occurred, the AIDS case and possibly the resulting death in this example, would be reported and counted in Ontario and not Nova Scotia.

Due to delays and under-reporting, the number of HIV/AIDS cases diagnosed during any period of time, especially in recent years, often exceeds the number of HIV/AIDS cases actually reported. This must be kept in mind when examining trends in HIV/AIDS over time, since many recent cases will not have been reported.

Tables and Figures

The number of HIV-positive test reports in Nova Scotia, by year of test, age and gender, are presented in Tables 1 through 3 and Figure 1. Table 4 presents the number of adult HIV-positive test reports by exposure category and year.

The number of cases of AIDS by year of diagnosis, age and gender, are presented in Tables 5 through 8 and Figure 2. Table 9 presents the number of adult cases of AIDS by exposure category and year.

The number of AIDS cases by year of death and age at diagnosis are presented in Table 10.

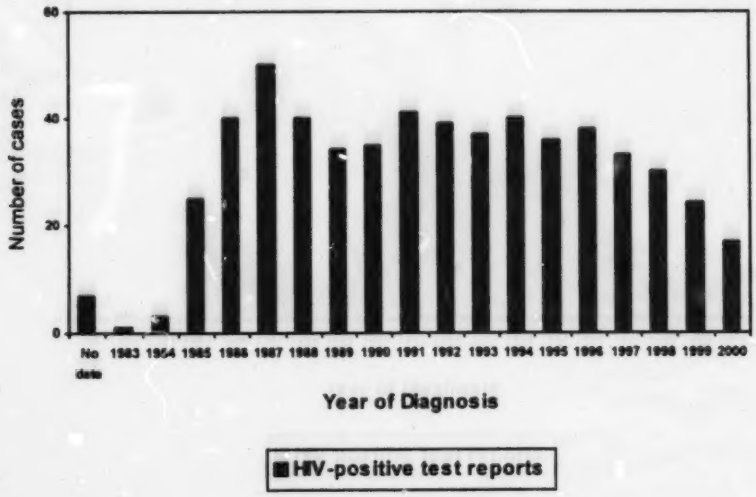
The assistance of the Bureau of HIV/AIDS, STD and TB, Centre for Infectious Disease Prevention and Control, Population and Public Health Branch, Health Canada is gratefully acknowledged.

Table 1 Number of HIV-positive test reports by year of test, 1983-2000, Nova Scotia

	Number of HIV-positive tests
No date specified	7
1983	1
1984	3
1985	25
1986	40
1987	50
1988	40
1989	34
1990	35
1991	41
1992	39
1993	37
1994	40
1995	36
1996	38
1997	33
1998	30
1999	24
2000	17
TOTAL	**570**

Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Figure 1 Number of HIV-positive test reports by year of diagnosis, Nova Scotia, 1983-2000



Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Table 2 Cumulative number of HIV-positive test reports, **adults and children** by gender, Nova Scotia, to December 31, 2000

	Males		Females		Unknown		Total	
Age	n	%	n	%	n	%	n	%
Children (< 15 years)	7	1.2	3	0.5	-	-	10	1.7
Adults (≥15 years)	460	80.7	70	12.3	-	-	530	93.0
Age Unknown	24	4.2	3	0.5	3	0.5	30	5.3
Total (all cases)	**491**	86.1	**76**	13.3	**3**	0.5	**570**	100.0

Note: Percentages may not add due to rounding.
Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Table 3a Number of HIV-positive test reports, **males**, by age and year of HIV-positive diagnosis, Nova Scotia

Age (Years)	<1992	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total	
Children (<15 years)											n	%
0	1	0	0	0	0	0	0	0	0	0	1	0.2
1-4	2	0	0	0	0	0	0	0	0	0	2	0.4
5-9	2	0	0	0	0	0	0	0	0	1	3	0.6
10-14	1	0	0	0	0	0	0	0	0	0	1	0.2
Total	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	1.4
Adults (≥15 years)												
15-19	0	0	2	0	0	0	0	0	0	0	2	0.4
20-24	30	3	2	3	2	1	0	1	2	2	46	9.4
25-29	62	5	5	2	4	6	9	5	1	1	100	20.4
30-34	43	9	8	8	4	7	4	4	1	1	89	18.1
35-39	44	8	9	5	7	9	6	5	7	3	103	21.0
40-44	23	3	5	7	2	3	2	4	3	1	53	10.8
45-49	11	2	1	3	5	3	2	1	4	1	33	6.7
50-54	3	1	2	4	2	3	1	1	2	0	19	3.9
55-59	3	1	0	0	1	0	1	2	1	0	9	1.8
60+	4	0	1	0	0	0	0	1	0	0	6	1.2
age unknown	13	0	0	2	4	2	3	0	0	0	24	4.9
Total	**236**	**32**	**35**	**34**	**31**	**34**	**28**	**24**	**21**	**9**	**484**	
Total (all)	**242**	**32**	**35**	**34**	**31**	**34**	**28**	**24**	**21**	**10**	**491**	100.00

*Note: Percentages may not add due to rounding. An additional 3 reports, age and gender unknown should be added to male and female report counts to total 570. (see Table 2).
Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Table 3b Number HIV-positive test reports, **females**, by age and year of HIV-positive diagnosis, Nova Scotia

Age (Years)	<1992	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total	
Children (<15 years)											n	%
0	1	0	0	0	0	0	0	0	0	0	1	1.3
1-4	1	0	0	0	0	0	0	0	0	0	1	1.3
5-9	0	0	0	0	0	0	0	0	0	0	0	0
10-14	1	0	0	0	0	0	0	0	0	0	1	1.3
Total	3	0	0	0	0	0	0	0	0	0	3	3.9
Adults (≥15 years)												
15-19	4	0	0	0	1	0	0	0	1	0	6	7.9
20-24	8	2	0	2	0	2	1	0	0	0	15	19.7
25-29	2	2	1	1	1	1	1	3	0	3	15	19.7
30-34	4	1	0	1	1	0	1	2	1	0	11	14.5
35-39	0	1	1	1	0	0	0	1	0	1	5	6.6
40-44	1	0	0	0	0	1	0	0	0	0	2	2.6
45-49	0	0	0	1	1	0	0	0	1	1	4	5.3
50-54	4	0	0	0	0	0	0	0	0	0	4	5.3
55-59	1	0	0	0	0	0	0	0	0	0	1	1.3
60+	3	1	0	0	0	0	1	0	0	2	7	9.2
age unknown	1	0	0	0	1	0	1	0	0	0	3	3.9
Total	28	7	2	6	5	4	5	6	3	7	73	
Total (all)	31	7	2	6	5	4	5	6	3	7	76	100.00

Note: Percentages may not add due to rounding. An additional 3 reports, age and gender unknown should be added to male and female report counts to total 570. (see Table 2).
Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Table 4 Number of adult (≥15 years of age) HIV-positive test reports, by exposure category and year of HIV-positive diagnosis, Nova Scotia

Exposure Category	Year of Diagnosis																							
	no date specified		<1992		1992		1993		1994		1995		1996		1997		1998		1999		2000		Total*	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
MSM	2	66.7	208	79.7	23	59.0	26	70.3	24	60.0	21	58.3	20	52.6	14	42.4	14	46.7	13	54.2	4	25.0	369	66.2
MSM/IDU	0	0.0	7	2.7	0	0.0	1	2.7	0	0.0	3	8.3	2	5.3	1	3.0	0	0.0	1	4.2	1	6.25	16	2.9
IDU	0	0.0	4	1.5	4	10.3	2	5.4	6	15.0	4	11.1	7	18.4	10	30.3	9	30.0	7	29.2	1	6.25	54	9.7
Recipient of Blood	0	0.0	12	4.6	1	2.6	1	2.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	14	2.5
Recipient of clotting factor	1	33.3	10	3.8	0	0.0	0	0.0	1	2.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	12	2.1
Heterosexual contact/endemic: origin in a Pattern II country	0	0.0	3	1.1	4	10.3	2	5.4	2	5.0	4	11.1	0	0.0	1	3.0	0	0.0	1	4.2	1	6.25	18	3.2
Heterosexual contact/endemic: heterosexual contact with person at risk	0	0.0	14	5.4	5	12.8	5	13.5	7	17.5	4	11.1	6	15.8	4	12.1	4	13.3	1	4.2	6	37.5	56	10.0
NIR-Het: no identified risk heterosexual	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	5.3	1	3.0	3	10.0	1	4.2	3	18.7	10	1.8
NIR: no identified risk	0	0.0	3	1.1	1	2.6	0	0.0	0	0.0	0	0.0	1	2.6	0	0	0	0.0	0	0.0	0	0.0	5	0.9
Unknown	0	0.0	0	0.0	1	2.6	0	0.0	0	0.0	0	0.0	0	0.0	2	6.1	0	0.0	0	0.0	0	0.0	3	0.5
Total	3	100	261	100	39	100	37	100	40	100	36	100	38	100	33	100	30	100	24	100	16	100	557	100.0

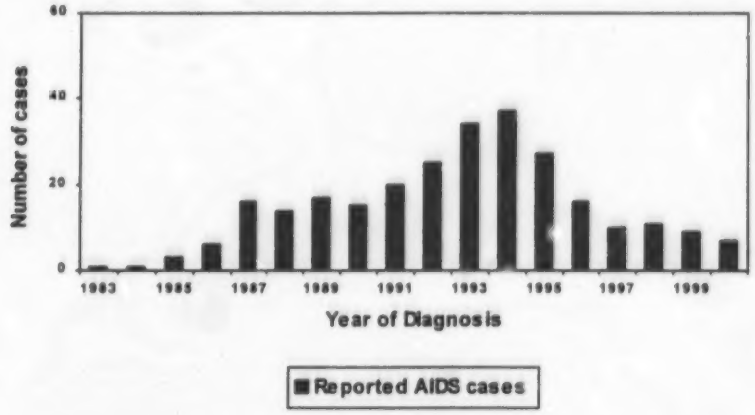
* Additional 3 reports with missing data
Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Table 5 Number of AIDS cases by year of diagnosis, Nova Scotia

Year	Number of AIDS cases
No date specified	
1983	1
1984	1
1985	3
1986	6
1987	16
1988	14
1989	17
1990	15
1991	20
1992	25
1993	34
1994	37
1995	27
1996	16
1997	10
1998	11
1999	9
2000	7
TOTAL	**269**

Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Figure 2
Reported number of AIDS cases by year of diagnosis, Nova Scotia, 1983-2000



Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Table 6 Cumulative number of AIDS cases, **adults and children** by gender, to December 31, 2000, Nova Scotia

	Males		Females		Total	
Age	n	%	n	%	n	%
Children (< 15 years)	1	0.4	0	0.0	1	0.4
Adults (≥15 years)	248	92.2	20	7.4	268	99.6
Total (all cases)	249	92.6	20	7.4	269	100

Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Table 7 Number AIDS cases by year of diagnosis and gender, Nova Scotia

	Males		Females		Total	
Year	n	Cumulative	n	Cumulative	n	Cumulative
<1992	84	84	9	9	93	93
1992	23	107	2	11	25	118
1993	31	138	3	14	34	152
1994	35	173	2	16	37	189
1995	25	198	2	18	27	216
1996	15	213	1	19	16	232
1997	10	223	0	19	10	242
1998	11	234	0	19	11	253
1999	9	243	0	19	9	262
2000	6	249	1	20	7	269
Total	249		20		269	

Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Table 8a Number of AIDS cases, **males**, by age and year of diagnosis, Nova Scotia

Age (Years)	<1992	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total	
Children (<15 years)											n	%
0	0	0	0	0	0	0	0	0	0	0	0	0
1-4	0	0	0	0	0	0	0	0	0	0	0	0
5-9	1	0	0	0	0	0	0	0	0	0	1	0.4
10-14	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	0	0	0	0	1	0.4
Adults (≥15 years)												
15-19	0	0	0	0	0	0	0	0	0	0	0	0
20-24	4	0	1	0	1	1	1	1	0	1	10	4.0
25-29	18	4	4	3	4	1	0	0	0	0	34	13.7
30-34	19	4	6	13	7	5	1	2	3	0	60	24.1
35-39	15	8	9	6	4	4	3	4	3	2	58	23.3
40-44	15	4	6	7	3	2	0	0	0	0	37	14.8
45-49	7	1	3	5	2	1	3	2	2	2	28	11.2
50-54	2	0	1	1	3	1	1	1	1	0	11	4.4
55-59	1	2	0	0	1	0	1	1	0	1	7	2.8
60+	2	0	1	0	0	0	0	0	0	0	3	1.2
age unknown	0	0	0	0	0	0	0	0	0	0	0	0.0
Total	83	23	31	35	25	15	10	11	9	6	248	
Total (all)	84	23	31	35	25	15	10	11	9	6	249	100.0

Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Table 8b Number AIDS cases, **females**, by age at diagnosis and year of diagnosis, Nova Scotia

Age (Years)	<1992	1992	1993	1994	1995	1996	1997	1998	1999	2000	Total	
Children (<15 years)											n	%
0	0	0	0	0	0	0	0	0	0	0	0	0.0
1-4	0	0	0	0	0	0	0	0	0	0	0	0.0
5-9	0	0	0	0	0	0	0	0	0	0	0	0.0
10-14	0	0	0	0	0	0	0	0	0	0	0	0.0
Total	0	0	0	0	0	0	0	0	0	0	0	0.0
Adults (≥15 years)												
15-19	1	0	0	0	0	0	0	0	0	0	1	5.0
20-24	0	0	0	2	0	0	0	0	0	0	2	10.0
25-29	0	0	1	0	1	1	0	0	0	0	3	15.0
30-34	2	1	2	0	1	0	0	0	0	0	6	30.0
35-39	1	0	0	0	0	0	0	0	0	0	1	5.0
40-44	0	0	0	0	0	0	0	0	0	0	0	0.0
45-49	0	0	0	0	0	0	0	0	0	0	0	0.0
50-54	2	0	0	0	0	0	0	0	0	0	2	10.0
55-59	2	0	0	0	0	0	0	0	0	0	2	10.0
60+	1	1	0	0	0	0	0	0	0	1	3	15.0
age unknown	0	0	0	0	0	0	0	0	0	0	0	0.0
Total	9	2	3	2	2	1	1	0	0	1	20	
Total (all)	**9**	**2**	**3**	**2**	**2**	**1**	**1**	**0**	**0**	**1**	**20**	100.0

Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Table 9 Number of adult (≥15 years) AIDS cases, by exposure category and year of diagnosis, Nova Scotia

Exposure Category	Year of Diagnosis																					
	<1992		1992		1993		1994		1995		1996		1997		1998		1999		2000		Total	%
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%		
MSM	72	78.3	19	76.0	25	73.5	27	73.0	19	70.4	12	75.0	6	60.0	8	72.7	6	66.7	5	71.4	199	74.3
MSM/IDU	2	2.2	1	4.0	0	0.0	1	2.7	2	7.4	1	6.3	0	0.0	0	0.0	0	0.0	0	0.0	7	2.6
IDU	3	3.3	0	0.0	2	5.9	2	5.4	1	3.7	1	6.3	3	30.0	1	9.1	1	11.1	0	0.0	14	5.2
Recipient of Blood	6	6.5	1	4.0	2	5.9	0	0.0	1	3.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	3.7
Recipient of clotting factor	4	4.3	1	4.0	1	2.9	1	2.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	2.6
Origin in a Pattern II country	1	1.1	1	4.0	2	5.9	1	2.7	1	3.7	0	0.0	0	0.0	0	0.0	1	11.1	1	14.3	8	3.0
Heterosexual contact with person at risk	1	1.1	1	4.0	2	5.9	5	13.5	3	11.1	2	12.5	1	10.0	2	18.2	0	0.0	1	14.3	18	6.7
HIR-Het: no identified risk heterosexual	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	11.1	0	0.0	1	0.4
NIR: no identified risk	3	3.3	1	4.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	1.5
Total	92		25		34		37		27		16		10		11		9		7	100	268	100

Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Table 10 Number of AIDS cases by year of death* and age at diagnosis

	Adults		Children		Total	
Year	n	Cumulative	n	Cumulative	n	Cumulative
<1992	60	60	1	1	61	61
1992	16	76	0	1	16	77
1993	27	103	0	1	27	104
1994	19	122	0	1	19	123
1995	22	144	0	1	22	145
1996	24	168	0	1	24	169
1997	10	178	0	1	10	179
1998	8	186	0	1	8	187
1999	10	196	0	1	10	197
2000	6	202	0	1	6	203
Total	202		1		203	

*Note: Year of death is unknown for 46 AIDS cases, including 45 adults and 1child
Province of Nova Scotia and Bureau of HIV/AIDS, STD and TB, CIDPC, Health Canada

Glossary of Terms[2]

MSM	Men who have had sex with men including men reporting either homosexual or bisexual contact
MSM/IDU	Men who have had sex with men and have injected drugs
IDU	Injecting drug use
Blood/Blood Products	Prior to 1998, a combined exposure category. Since 1998, separated into: recipient of blood; recipient of clotting factor
Heterosexual Contact/Endemic	Prior to 1998, a combined exposure category. Since 1998, separated into: endemic and heterosexual contact. Endemic: persons born in a pattern II country (i.e. country in which predominant means of HIV transmission is heterosexual contact) Heterosexual Contact: persons reporting heterosexual contact with person either HIV-infected or at increased risk for HIV infection (i.e. injecting drug user, bisexual male, from endemic country).
NIR-HET	No Identified Risk-Heterosexual (NIR-HET): Classification for case if heterosexual contact is only risk factor reported and nothing known about mode of exposure for heterosexual partner.
Occupational Exposure	Exposure to HIV-contaminated blood or body fluids, or concentrated virus in occupational setting
NIR (No Identified Risk)	History of exposure to HIV through any of modes listed is unknown or is no reported history.
Other	Mode of HIV transmission known but cannot be classified among major exposure categories

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2 Division of HIV/AIDS Epidemiology and Surveillance, Bureau of HIV/AIDS, STD and TB, Population and Public Health Branch, Health Canada. HIV and AIDS in Canada Surveillance Report to December 31,2000. April,2001. Minister of Public Works and Government Services Canada 2001.